IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application:	)	Title:
Vincent Park et. al.	)	Paging Methods and Apparatus
	)	
Application No.: 10/774,561	)	Confirmation No.: 1112
	)	
Filed: February 29, 2004	)	Examiner: Willie J. Daniel, Jr.
	)	
Attorney Docket No.: 060568U3	)	Group Art Unit: 2617

PETITION TO RECTIFY IMPROPER ACTION BY THE EXAMINER UNDER 37 C.F.R. § 1.181(a)

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

<u>Petitioners request urgent decision for this petition in light of the due date to respond to the Examiner's Office Action dated February 5, 2009 has passed, with cumulative extensions of time needed if Petitioners are in a position to file a response.</u>

Petitioners received an Office Action dated February 5, 2009 for the above-identified application as non-responsive under MPEP § 821.03. Petitioners hereby petition the Commissioner to rectify the Examiner's improper action for the instant application.

Prior to the aforementioned Office Action, Petitioners received an earlier Office Action dated October 7, 2008. Petitioners filed a Response to said earlier Office Action on November 11, 2008. A copy of the filed Response is attached herewith as Exhibit A.

In both of the aforesaid Office Actions, the Examiner repeatedly denied entries of Petitioners' reponses as non-complicant under MPEP § 821.03.

Petitioners respectifully submit that Petitioners' responses are not inconsistent with MPEP § 821.03. The source of the contention stems from the lack of proper restriction requirements by the Examiner throughout the application. MPEP § 814 specifically states that:

> The Examiner must provide a clear and detailed record of the restriction requirement to provide a clear demarcation between restricted inventions so that it can be determined whether the inventions claimed in a continuing application are consonant with the restriction requirement and therefore subject to the prohibition against double patenting rejection under 35 U.S.C. § 121.

Petitioners carefully studied the file record and found no clear and detailed record of the any restriction requirement as mandated under MPEP § 814.

Specifically, in reply to the Office Action mailed on June 13, 2006, Petitioners filed a response on December 15, 2005 but was denied entry as not responsive under MPEP § 821.03. The denial was improper in the first place because there had not been any restriction requirement by the Office prior to June 13, 2006. Instead, the restriction requirement and the denial of entry under MPEP § 821.03 were made in the same Office Action of June 13, 2006, wherein the paragraphs under the "Election/Restrictions" session merely reiterated the claims in verbatim and certainly is not "clear and detailed" as required under MPEP § 814.

Nor was there any clear and detailed restriction requirement in the latest Office Actions of February 5, 2009 and October 7, 2008. Again, the claims were merely repeated in the requirements with no rationale provided for support as to why the claim groups are independent and/or distinct.

Lack of proper restriction requirements can jeopardize Petitioners' later decision to file any divisional application. The law is settled that without a proper restriction requirement,

patents issued from an applicant's divisional applications could be later held invalid. *Geneva Pharms. Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1381, 68 USPQ.2d 1865, 1871 (Fed. Cir. 2003).

Petitioners telephoned Examiner Willie J. Daniel Jr. and his supervisor Mr. Charles Appiah on March 6, 2009 for resolution. No response has been received.
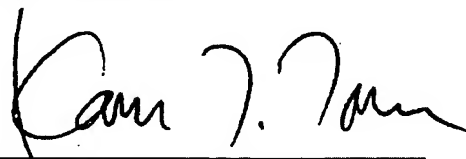
In light of the forgoing, Petitioners respectfully request Petitioners' petition be granted. Specifically, Petitioners respectfully request the Examiner's reconsideration and entry of Petitioners' response filed on June 16, 2008. Should the restriction requirement be maintained, Petitioners respectfully request a clear demarcation of the requirement put on record pursuant to MPEP § 817.

In the event of any fees that may be due or any overpayments that may be associated with this petition, please charge or deposit the amount to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: March 11, 2009   By: _____

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application: 　　Vincent Park, et. al.	)	Title: 　　Paging Method and Apparatus
	)	
	)	Confirmation No.: 1112
Application No: 10/774,561	)	
	)	Examiner: Willie J. Daniel, Jr.
Filed: February 9, 2004	)	
	)	Group Art Unit: 2617
	)	
Attorney Docket No.: 060568U3	)	

RESPONSE

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

　　In response to the Office Action dated October 7, 2008, please find Applicants' response as set forth below. Applicants hereby petition for a one-month (1-month) Extension of Time.

PENDING CLAIMS AS AMENDED

Claims 1-57. (Canceled)

58. (Previously Presented) A system for distributed packet-based paging having a plurality of access nodes configured to exchange paging information over corresponding access links, the plurality of access nodes serving a plurality of end nodes, each end node being associated with, and configured to receive a page from, at least one access node,

the system further characterized in that each of the plurality of access nodes comprises at least one of a paging requirements determination (PRD) module and a paging resource control (PRC) module,

where each PRD module determines paging requirements to send to a PRC module in communication with an intended end node of a page, the paging requirements being determined at least in part (i) from analyzing at least one of a header field and payload field, using a packet classification technique, from a data message received over a corresponding access link and (ii) from stored information uniquely associated with the access node in which the PRD module resides, and

where each PRC module provides PRC functionality in accordance with the paging requirements received from the PRD module, where the PRC functionality includes controlling at least one of (i) paging resources, (ii) paging operations, and (iii) the generation of pages to an intended end node.

59. (Previously Presented) An access node for use in a system with distributed packet-based paging and characterized by a plurality of access nodes configured to exchange paging information over corresponding access links and a plurality of end nodes associated with, and configured to receive a page from, at least one access node, the access node comprising at least one of:

a paging requirements determination (PRD) module and a paging resource control (PRC) module,

the PRD module determining paging requirements to send to a PRC module in communication with an intended end node of a page, the paging requirements being determined at least in part (i) from analyzing at least one of a header field and payload field, using a packet classification technique, from a data message received over a corresponding access link and (ii) from stored information uniquely associated with the access node in which the PRD module resides, and

the PRC module providing PRC functionality in accordance with the paging requirements received from the PRD module, where the PRC functionality includes controlling at least one of (i) paging resources, (ii) paging operations, and (iii) the generation of pages to an intended end node.

60. (Previously Presented) The access node of claim 59, wherein the PRD module further includes:

a monitoring agent module that determines when to initiate a page to the intended end node;

a tracking agent module that tracks the location of end nodes based on received location update signals; and

an anchor paging agent module that coordinates page request signaling to the intended node.

61. (Previously Presented) The access node of claim 59, wherein the PRC module further includes:

a local paging agent module that coordinates signaling between the PRD module and other access nodes.

62. (Previously Presented) The access node of claim 59, wherein the exchange of the paging information is based on an Internet protocol (IP).

63. (Previously Presented) The access node of claim 62, wherein the PRD module determines the paging requirements based on matching IP datagrams to specific paging requirements.

64. (Previously Presented) The access node of claim 59, wherein at least one of the determined paging requirements is indicative of a quality of service (QoS).

65. (Previously Presented) The access node of claim 64, wherein the QoS includes a page transmission timing constraint, wherein the page transmission timing constraint indicates paging latency information and specifies an upper bound on paging delay.

66. (Previously Presented) The access node of claim 64, wherein the QoS is one of a plurality of levels.

67. (Previously Presented) The access node of claim 64, wherein the QoS requires at least one of transmission of the page multiple times and retransmission of the page at least once in the absence of an acknowledgment.

68. (Previously Presented) The access node of claim 59, wherein the determined paging requirements includes determining whether a plurality of paging requests are associated as a group with a common quality of service indicator; and the PRC functionality includes allocating a fraction of paging channel capacity or paging transmission opportunities to the plurality of page requests associated with the group.

69. (Previously Presented) The access node of claim 59, wherein the determined paging requirements includes information indicating a state of device operation in which an end node to which the page is directed is to operate after receiving the page.

70. (Previously Presented) A method for communicating paging information by an access node for use in a system with distributed packet-based paging and characterized by a plurality of access nodes configured to exchange paging information over corresponding access links and a plurality of end nodes associated with, and configured to receive a page from, at least one access node, the access node comprising at least one of a paging requirements determination (PRD) module and a paging resource control (PRC) module, the method comprising:

determining, by the PRD module, paging requirements to send to a PRC module in communication with an intended end node of a page, the paging requirements being determined at least in part (i) from analyzing at least one of a header field and payload field, using a packet classification technique, from a data message received over a corresponding access link and (ii) from stored information uniquely associated with the access node in which the PRD module resides, and

controlling, by the PRC module, in accordance with the paging requirements received from the PRD module, at least one of (i) paging resources, (ii) paging operations, and (iii) the generation of pages to an intended end node.

71. (Previously Presented) The method of claim 70, further comprising:
determining, by the PRD module, when to initiate a page to the intended end node;
tracking, by the PRD module, the location of end nodes based on received location update signals; and
coordinating, by the PRD module, page request signaling to the intended end node.

72. (Previously Presented) The method of claim 70, further comprising:
coordinating signaling, by the PRC module, between the PRD module of one access node and other access nodes.

73. (Previously Presented) The method of claim 70, wherein the exchange of the paging information is based on an Internet protocol (IP).

74. (Previously Presented) The method of claim 73, wherein the determining of the paging requirements includes determining the paging requirements based on matching IP datagrams to specific paging requirements.

75. (Previously Presented) The method of claim 70, wherein the determining of the paging requirements includes determining that at least one paging requirement is indicative of a quality of service (QoS).

76. (Previously Presented) The method of claim 75, wherein the determining of the paging requirements includes determining that the QoS includes a page transmission timing constraint, wherein the page transmission timing constraint indicates paging latency information and specifies an upper bound on paging delay.

77. (Previously Presented) The method of claim 75, wherein the determining of the paging requirements includes determining that the QoS is one of a plurality of levels.

78. (Previously Presented) The method of claim 75, wherein the determining of the paging requirements includes determining that the QoS requires at least one of transmission of the page multiple times and retransmission of the page at least once in the absence of an acknowledgment.

79. (Previously Presented) The method of claim 70, wherein the determining of the paging requirements includes determining whether a plurality of paging requests are associated as a group with a common quality of service indicator; and further comprising:

allocating by the PRC module a fraction of paging channel capacity or paging transmission opportunities to the plurality of page requests associated with the group.

80. (Previously Presented) The method of claim 70, wherein the determining of the paging requirements includes determining that the paging requirements includes information indicative

of a state of device operation in which an end node to which the page is directed is to operate after receiving the page.

81. (Previously Presented) A computer program product including a computer readable medium having instructions for a processor of an access node for use in a system with distributed packet-based paging and characterized by a plurality of access nodes configured to exchange paging information over corresponding access links and a plurality of end nodes associated with, and configured to receive a page from, at least one access node, the access node comprising at least one of a paging requirements determination (PRD) module and a paging resource control (PRC) module, the instructions causing the processor to:

    determine, by the PRD module, paging requirements to send to a PRC module in communication with an intended end node of a page, the paging requirements being determined at least in part (i) from analyzing at least one of a header field and payload field, using a packet classification technique, from a data message received over a corresponding access link and (ii) from stored information uniquely associated with the access node in which the PRD module resides, and

    control, by the PRC module, in accordance with the paging requirements received from the PRD module, at least one of (i) paging resources, (ii) paging operations, and (iii) the generation of pages to an intended end node.

82. (Previously Presented) The computer program product of claim 81, further comprising instructions for causing the processor to:

    determine, by the PRD module, when to initiate the page to the intended end nodet;

    track, by the PRD module, the location of end nodes based on received location update signals; and

    coordinate, by the PRD module, a page request signaling to the intended end nodes.

83. (Previously Presented) The computer program product of claim 81, further comprising instructions for causing the processor to:

coordinate signaling by the PRC module between the PRD module of one access node and other access nodes.

84. (Previously Presented) The computer program product of claim 81, wherein the exchange of the paging information is based on an Internet protocol (IP).

85. (Previously Presented) The computer program product of claim 84, wherein the instructions for causing the processor to determine the paging requirements includes instructions for causing the processor to determine the paging requirements based on matching IP datagrams to specific paging requirements.

86. (Previously Presented) The computer program product of claim 81, wherein the instructions for causing the processor to determine the paging requirements includes instructions for causing the processor to determine that at least one paging requirement is indicative of a quality of service (QoS).

87. (Previously Presented) The computer program product of claim 86, wherein the instructions for causing the processor to determine the paging requirements includes instructions for causing the processor to determine that the QoS includes a page transmission timing constraint, wherein the page transmission timing constraint indicates paging latency and specifies an upper bound on paging delay.

88. (Previously Presented) The computer program product of claim 86, wherein the instructions for causing the processor to determine the paging requirements includes instructions for causing the processor to determine that the QoS is one of a plurality of levels.

89. (Previously Presented) The computer program product of claim 86, wherein the instructions for causing the processor to determine the paging requirements includes instructions for causing

the processor to determine that the QoS requires at least one of transmission of the page multiple times and retransmission of the page at least once in the absence of an acknowledgment.

90. (Previously Presented) The computer program product of claim 81, wherein the instructions for causing the processor to determine the paging requirements includes instructions for causing the processor to determine whether a plurality of paging requests are associated as a group with a common quality of service indicator; and further comprising instructions for causing the processor to allocate by the PRC module a fraction of paging channel capacity or paging transmission opportunities to the plurality of page requests associated with the group.

91. (Previously Presented) The computer program product of claim 81, wherein the instructions for causing the processor to determine the paging requirements includes instructions for causing the processor to determine that the paging requirements includes information indicative of a state of device operation in which an end node to which the page is directed is to operate after receiving the page.

92. (Previously Presented)   An access node for use in a system with distributed packet-based paging and characterized by a plurality of access nodes configured to exchange paging information over corresponding access links and a plurality of end nodes associated with, and configured to receive a page from, at least one access node, the access node comprising at least one of:

> first means and second means,

>> the first means determining paging requirements to send to a PRC module in communication with an intended end node of a page, the paging requirements being determined at least in part (i) from analyzing at least one of a header field and payload field, using a packet classification technique, from a data message received over a corresponding access link and (ii) from stored information uniquely associated with the access node in which the PRD module resides, and

the second means providing PRC functionality in accordance with the paging requirements received from the PRD module, where the PRC functionality includes controlling at least one of (i) paging resources, (ii) paging operations, and (iii) the generation of pages to an intended end node.

93. (Previously Presented) The access node of claim 92, wherein the first means further includes:
means for determining when to initiate the page to the intended end node;
means for tracking a location of end nodes based on received location update signals; and
means for coordinating page request signaling to the intended end node.

94. (Previously Presented) The access node of claim 92, further comprising:
means for coordinating by the second means signaling between the first means of one access node and other access nodes.

95. (Previously Presented) The access node of claim 92, wherein the exchange of the paging information is based on an Internet protocol (IP).

96. (Previously Presented) The access node of claim 95, wherein the first means includes means for determining the paging requirement based on matching IP datagrams to specific paging requirements.

97. (Previously Presented) The access node of claim 92, wherein the first means includes means for determining that at least one paging requirement is indicative of a quality of service (QoS).

98. (Previously Presented) The access node of claim 97, wherein the QoS includes a page transmission timing constraint, wherein the page transmission timing constraint indicates paging latency information and specifies an upper bound on paging delay.

99. (Previously Presented) The access node of claim 97, wherein the QoS is one of a plurality of levels.

100. (Previously Presented) The access node of claim 97, wherein the QoS requires at least one of transmission of the page multiple times and retransmission of the page at least once in the absence of an acknowledgment.

101. (Previously Presented) The access node of claim 92, wherein the first means includes means for the determining whether a plurality of paging requests are associated as a group with a common quality of service indicator; and the second means includes means for allocating a fraction of paging channel capacity or paging transmission opportunities to the plurality of page requests associated with the group.

102. (Previously Presented) The access node of claim 92, wherein the first means includes means for determining that the paging requirements includes information indicating a state of device operation in which an end node to which the page is directed is to operate after receiving the page.

103. (Previously Presented) An end node for use in a system with distributed packet-based paging and characterized by a plurality of access nodes configured to exchange paging information over corresponding access links and a plurality of end nodes associated with, and configured to receive a page from, at least one access node, the distributed packet-based paging system further characterized in that each of the plurality of access nodes includes at least one of a paging requirements determination (PRD) module and a paging resource control (PRC) module, where each PRD module determines paging requirements to send to a PRC module currently in communication with the intended end node of the page, the paging requirements being derived at least in part (i) from analyzing at least one of a header field and payload field, using a packet classification technique, from a data message received over a corresponding access link and (ii) from stored information uniquely associated with the access node in which the PRD module resides, and each PRC module provides PRC functionality in accordance with paging

requirements received from the PRD module, where the PRC functionality includes controlling at least one of (i) paging resources, (ii) paging operations, and (iii) the generation of pages to an intended end node,.

the end node comprising:

means for taking a first action when receiving a first page from a first access node having a first PRC module, where the first PRC module generates the first page to the end node on the basis of a data message received by a first PRD module; and

means for taking a second action when receiving a second page, different from the first page, from a second access node having a second PRC module, where the second PRC module generates the second page on the basis of the same data message received by a second PRD module.

104. (Previously Presented) A method for receiving a page by an end node in a system with distributed packet-based paging and characterized by a plurality of access nodes configured to exchange paging information over corresponding access links and a plurality of end nodes associated with, and configured to receive the page from, at least one access node, the distributed packet-based paging system further characterized in that each of the plurality of access nodes includes at least one of a paging requirements determination (PRD) module and a paging resource control (PRC) module, where each PRD module determines paging requirements to send to a PRC module currently in communication with the intended end node of the page, the paging requirements being derived at least in part (i) from analyzing at least one of a header field and payload field, using a packet classification technique, from a data message received over a corresponding access link and (ii) from stored information uniquely associated with the access node in which the PRD module resides, and each PRC module provides PRC functionality in accordance with paging requirements received from a PRD module, where the PRC functionality includes controlling at least one of (i) paging resources, (ii) paging operations, and (iii) the generation of pages to an intended end node,

the method comprising:

taking a first action when receiving a first page from a first access node having a first PRC module, where the first PRC module generates the first page to the end node on the basis of a data message received by a first PRD module; and

taking a second action when receiving a second page, different from the first page, from a second access node having a second PRC module, where the second PRC module generates the second page on the basis of the same data message received by a second PRD module.

REMARKS

Claims 58-104 are pending in the application. In the aforementioned Office Action, the Examiner alleged Applicants' response filed on June 16, 2008 as non-responsive under MPEP § 821.03.

To begin with, there has not been any proper restriction requirement in this application. Yet, for the sake of argument, assuming that the restriction requirement in the prior actions were proper, it is respectfully submitted that Applicants' latest response is not inconsistent with MPEP § 821.03.

MPEP § 821.03 is essentially an elaboration of 37 C.F.R. § 1.145, which states:

> If, after an office action on an application, the applicant presents claims directed to an invention distinct from and independent of the invention previously claimed, the applicant will be required to restrict the claims to the invention previously claimed if the amendment is entered, subject to reconsideration and review as provide in §§ 1.144.

Here, Applicants' new claims 58-104 are basically directed to the same inventive subject matter as previously claimed, i.e., canceled claims 1-19, 27-34 and 46-57. Specifically, all the aforementioned claims concern with an access node which can be a base station. Under MPEP § 714, Applicants is entitled to rewrite and present new claims in response to an office action. As in this case, Applicants merely canceled claims 1-19, 27-34 and 46-57 and presented new claims 58-104 in Applicants' reply dated June 16, 2008 for re-consideration in response to the Examiner's rejection.

Nevertheless, the Examiner's attention is directed to relevant part of the MPEP § 814 which states:

> The Examiner must provide a clear and detailed record of the restriction requirement to provide a clear demarcation between restricted inventions so that it can be determined whether the inventions claimed in a continuing application are consonant with

the restriction requirement and therefore subject to the prohibition against double patenting rejection under 35 U.S.C. § 121.

As is in this case, Applicants may later file divisional applications of the non-elected claims. Without a proper restriction requirement, patents issued from Applicants' divisional applications could be later held invalid. *Geneva Pharms. Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1381, 68 USPQ.2d 1865, 1871 (Fed. Cir. 2003).

Applicants carefully studied the file record and found no clear and detailed record of the any restriction requirement as mandated under MPEP § 814.

Specifically, in reply to the Office Action mailed on June 13, 2006, Applicants' filed a response on December 15, 2005 but was denied entry as not responsive under MPEP § 821.03. The denial was improper in the first place because there had not been any restriction requirement by the Office prior to June 13, 2006. Instead, the restriction requirement and the denial of entry under MPEP § 821.03 were made in the same Office Action of June 13, 2006, wherein the paragraphs under the "Election/Restrictions" session merely reiterated the claims in verbatim and certainly is not "clear and detailed" as required under MPEP § 814.

Nor was there any clear and detailed restriction requirement in the latest Office Action of October 7, 2008. Again, the claims were merely repeated in the Office Action of October 7, 2008 with no rationale provided for support as to why the claim groups are independent and/or distinct.

In light of the forgoing, Applicants respectfully request reconsideration and entry of Applicants' reply filed on June 16, 2008. Further, should the Examiner maintain the restriction requirement, Applicants respectfully request a clear demarcation of the requirement put on record pursuant to MPEP § 817.
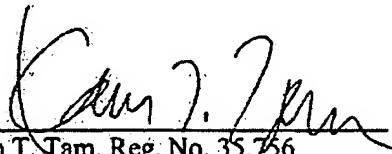
In the event of any fees that may be due or any overpayments that may be associated with this response, please charge or deposit the amount to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: November 11, 2008   By: _____
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